ABSTRACT OF THE DISCLOSURE

An aircraft wing includes a leading airfoil element and a trailing airfoil element. At least one slot is defined by the wing during at least one transonic condition of the wing. The slot may either extend spanwise along only a portion of the wingspan, or it may extend spanwise along the entire wingspan. In either case, the slot allows a portion of the air flowing along the lower surface of the leading airfoil element to split and flow over the upper surface of the trailing airfoil element so as to achieve a performance improvement in the transonic condition.